

California Public Employees' Retirement System my|CalPERS Post Implementation Evaluation Review (PIER) Plus Report

Briefing to the Finance and Administration Committee February 2015



- Overview
- Approach
- PSR background and context
- my|CalPERS timeline and key findings
- Costs and benefits
- Recommendations
- Summary



my|CalPERS Post-Implementation Evaluation Report and Benefits Realization Assessment

- Purpose
 - Evaluate whether the project outcomes, end-user satisfaction, and business expectations of myICalPERS have achieved their originally intended objectives and to assess the realization of benefits through the enterprise system solution.
- Objectives
 - Assess whether the new system functions as expected and was delivered as documented.
 - Compare the projected costs approved and the actual costs of implementing and maintaining.
 - Compare the proposed cost savings to the actual cost savings.
 - Evaluate the effectiveness of the process to re-scope and re-budget during the project lifecycle.
 - Assess the effectiveness of project governance, project management and change management controls as compared to best practices.
 - Identify lessons learned and successful practices.
 - Examine the efficacy of the working business solution to see what further improvements can be made to optimize the benefits of the enterprise system.

The results will help identify ways to improve and optimize the delivery and outcomes of future projects undertaken by CalPERS and provide guidance for the optimization of benefits



INITIATE

Plan activities, confirm requirements and determine any immediate needs

DISCOVER

Collect data from stakeholders using the most appropriate methods

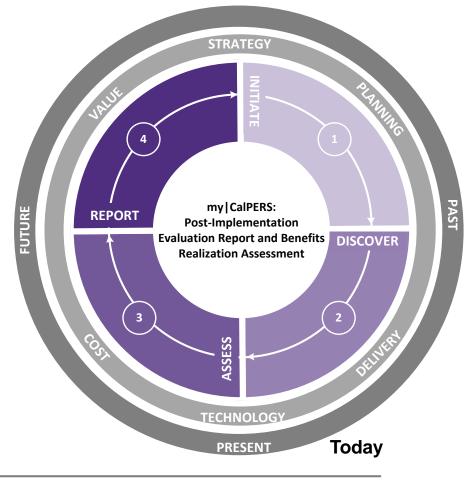
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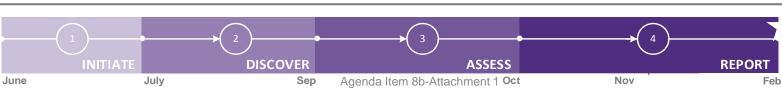
Systematically review information to inform the assessment

REPORT

Timeline

Document and present the conclusion of the assessment







ASSESSMENT CATEGORIES				
Strategic Management	Organizational Change Management			
Benefits Realization Management	Solution Development and Implementation			
Governance Maintenance and Operations				
Project Management				



- 1970s: CalPERS began to automate its primary retirement functions utilizing multiple standalone systems.
- Mid-90s: CalPERS begins attempt to consolidate pension systems into a single system COMET. COMET terminated in 2003 due to implementation challenges.
- 2004: Pension System Resumption (PSR) project envisioned. PSR drivers:
 - Expected increase in number of Employers and in active and retired Members Ο
 - Increase in customer and workforce expectation for capabilities and service 0
 - Pressure to maintain and reduce costs
- PSR was intended to address significant data and automation weaknesses in the existing systems that led to substantial data validation, rework and reconciliation, and that made it difficult and time-consuming to make system changes.
- PSR would also address the aging technology of the existing systems, reduce the variety of different technologies being used, and reduce the long-term reliance on contractors.
- Primary of objective of PSR was to consolidate and replace 49 separate systems into one system – my|CalPERS. Some of the systems needed to be replaced because they were no longer being supported.

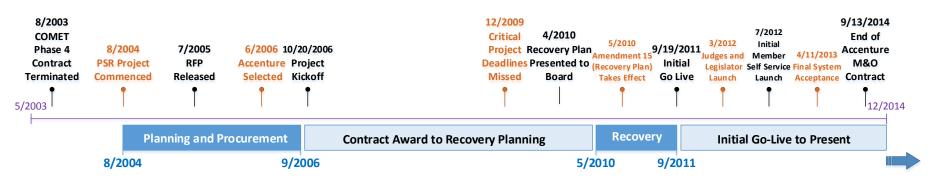


- PSR would be one of the most complex public sector IT projects attempted in the 2005-2012 timeframe.
- California, in common with many other states and with large commercial enterprises, has struggled to successfully implement large, complex technology-enabled transformation projects. These are exceedingly difficult endeavors – more than 40% of these projects fail and are either abandoned or are started anew.¹
- PSR's 'peer group' in California included the DMV IT Modernization project, the State Controllers' payroll project (MyCalPAYS), the LA Unified School District (LAUSD) HR/Payroll system, the Administrative Office of the Courts Court Case Management System (CCMS) and the Department of Corrections Strategic Offender Management (SOMS) project.
- Of these projects, only my|CalPERS, LAUSD and SOMS are substantially implemented today.

1. Standish Group study conducted for ComputerWorld, based on 3,555 projects between 2003 and 2012 with labor costs in excess of \$10M

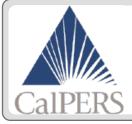


Timeline



PSR Stages

- Planning and Procurement (August 2004 September 2006)
- Contract Award to Recovery Planning (October 2006 to April 2010)
- Recovery to Initial Go Live (May 2010 to September 2011)
- Initial Go Live to Present (September 2011 to Present)



Key Findings - PSR Planning and Procurement (August 2004 to September 2006)

Finding	Impact	Lessons learned	Recommendations
 PSR business case predicated on improved customer experience, operational improvements, and technology modernization. Project was not justified based on specific quantitative improvement targets. More detailed quantitative and qualitative targets (KPIs) were later identified, but some were unrealistic and some were unmeasurable. 	 Investment in PSR was not made on a purely economic basis, therefore success of project cannot be judged on purely economic grounds. Return on Investment (ROI) targets were not available to executives and to the Board to assist in decision-making. 	 Clearly documenting the basis for a major IT investment – including any specific quantitative results expected – can assist leadership in judging the success of the project and in deciding between alternative courses of action. 	 Assess the quantitative and qualitative impacts of future planned IT investments, and use that information to assist in decision-making. Note: CalPERS is currently making use of quantitative ROI data in prioritizing new investments.
 CalPERS' IT organization led the early stages of project. Business management and staff were less engaged in decision-making during the procurement process. 	• This impacted business staff support and buy-in for the project in the early stages, although the situation improved significantly later on.	 Engage business leadership in leadership positions early on in any new project. Projects should be driven by business strategy and priorities. 	 my CalPERS currently has a governance structure with joint leadership by IT and business executives. Other projects should also follow this model.



Key Findings - PSR Planning and Procurement (August 2004 to September 2006)

Finding	Impact	Lessons learned	Recommendations
 PSR used an 'Alternative Procurement' process intended to avoid an overly prescriptive RFP and to foster vendor innovation. As a result, requirements were relatively high-level. Traditional Firm-Fixed Price (FFP) contract structure also employed. This was inconsistent with the progressive elaboration of requirements needed to develop the system. 	 Procurement process was apparently successful, with contract award made to Accenture with no protests. However, seeds of future challenges were sown, since FFP structure of contract (assumes tightly defined scope, cost and schedule) did not match actual solution development approach (based on loosely defined scope). This made change requests very likely. 	 Contract structure needs to match circumstances of solution being procured – rigid and prescriptive contract structures should only be used when scope and level of effort are also well understood. 	 'Alternative Procurement' process is a good tool. However, if scope and complexity are not clearly understood then do not use a traditional firm-fixed price contract. Optimization is planning to use a refined approach leveraging a mix of time and materials (analysis) and fixed price (design and implementation). Consider integration of business process reengineering with the procurement process. Ensure equal representation of business and technology stakeholders during

procurement process.



Key Findings - PSR Contract Award to Recovery Planning (October 2006 to April 2010)

Finding	Impact	Lessons learned	Recommendations
 Project was not well planned and managed by Accenture in initial stages, and Accenture did not initially provide the right level of resources. 	 Schedule was not meaningful and could not be used to predict project completion. Early deliverable quality was poor. Incorrect assumptions were made regarding data quality. Technical development was not integrated. 	 Require close adherence to proven project management practices. Data conversion is highly complex and should be started very early. Test on real converted data, not synthetic data. Create a common architectural design and ensure all developers follow it. 	 CalPERS should apply these lessons learned to future projects (e.g., Optimization, Actual Valuation System etc.).
 Early on, CalPERS did not devote the correct type of resources to the project. The CalPERS PMO strategy was not fully developed and staffing plans were defined in an ad-hoc manner. 	 CalPERS' representation in early business requirements sessions were not the appropriate resources for the project. Requirements needed to be revisited later on. 	 Ensure most qualified and experienced business representatives are devoted to key projects. Backfill as necessary. When project staff are strategically aligned with the vision, they manage the transition more successfully. 	 CalPERS should apply these lessons learned to future projects. CalPERS currently has senior business resources involved in requirements definition.



Key Findings - PSR Contract Award to Recovery Planning (October 2006 to April 2010)

Finding	Impact	Lessons learned	Recommendations
 PSR contract provisions were not effectively utilized. In particular, Deliverable Expectation Documents (DEDs) and contract provisions relating to inspection of Work In Progress were not effectively utilized. 	 Some early Accenture deliverables were of low quality and/or incomplete. CalPERS staff were unaware of issues relating to Accenture work products until relatively late in the project. 	 DEDs are an extremely useful contractual protection, and should be used effectively. The State should have a dedicated contract management group, with experienced IT, legal and other consultants. 	 CalPERS addressed many of these issues later in the PSR project. Future projects should ensure dedicated, expert contract management and oversight.
 Progress measures focused on paper deliverables vs software completion. Project delays became clear once CalPERS began to see system testing results. 	 Delays in software development and testing were not apparent to CalPERS until relatively late in the project, since paper deliverables were generally submitted on time. CalPERS and Accenture had to re-plan the project and extend the completion date. 	 Ensure the metrics used to measure projects reflect true progress (aka Earned Value) in building the product. Obtain timely, granular data on software development progress, and use this data to track the actual completion of the work and to project an estimated completion date. 	 Limit the number of paper deliverables to the minimum necessary. In addition to necessary paper deliverables, use metrics such as number of completed development objects and completed test cases as measures of project progress. Capture productivity information so future work can be estimated.



Key Findings - Recovery to Initial Go Live (May 2010 to September 2011)

Finding	Impact	Lessons learned	Recommendations	
 New leadership team from Accenture and CalPERS. Leadership had prior experience with large, complex IT projects. Strong commitment from all parties (business, IT and vendor) to complete project successfully. 	 Much stronger, collaborative partnership. CalPERS business leadership in strong leadership role. Extremely committed staff (both CalPERS and Accenture). 	 Strong, experienced leadership required for both state and contractor. Experience with projects of a similar size and complexity important. Shared goals to which everyone is committed result in extraordinary efforts. 	 Focus on experience of project leadership from State and from contractor. Focus on organizational change management for both the project team and for end users to ensure their commitment and enthusiasm. 	
 Significant progress made during Recovery period. As go-live date approached, gaps and data issues remained. Conscious decision to go live with core functionality. 	 System went live, replacing 49 systems as intended. Several hundred workarounds were developed to address gaps in functionality or data at go-live. Go-live experienced challenges, some expected, some not. 	 Go-live on large, complex projects requires intense effort and commitment. Regardless of pre-implementation efforts, expect data conversion issues and the ongoing impact this might have to production operations. Strategic goals and KPIs should be S.M.A.R.T. 	 Maintain a central register of all workarounds and ensure they are decommissioned once no longer necessary. Put contingency plans in place prior to implementation to address any data that does not convert automatically. 	



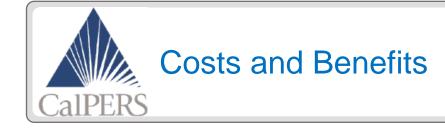
Key Findings - Initial Go Live to Present (September 2011 to Present)

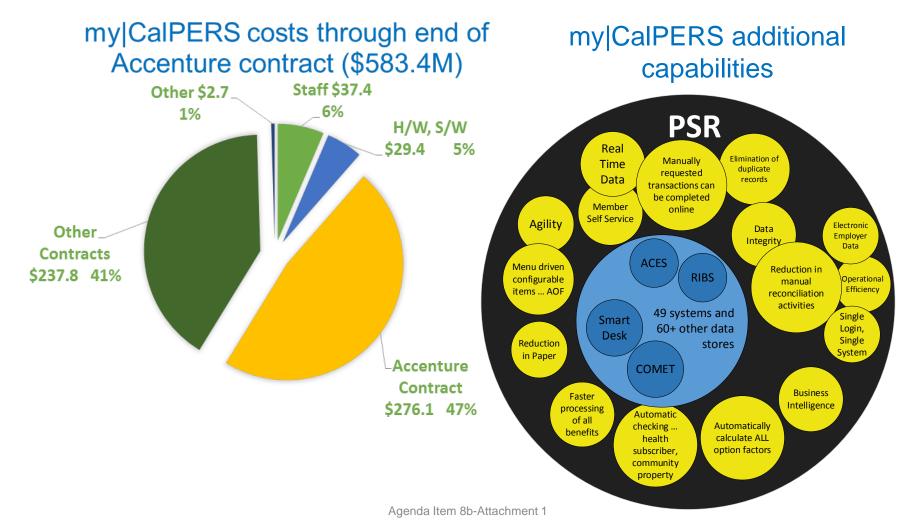
Finding	Impact	Lessons learned	Recommendations
 Stabilization period included correcting tens of thousands of defects over a two year period. Focus on improving my CalPERS functionality. Project responsibility transitioned from Accenture to CalPERS staff. 	 Significant improvements in user and stakeholder satisfaction. Number of my CalPERS defects and workarounds reduced. Some architectural and design issues introduced pre- Recovery still exist. 	 Strong partnership between IT and business required to collaboratively prioritize defect remediation. Balance focus on functional improvement with focus on data quality improvement, technical improvement, and operations and maintenance maturation. 	 Create balanced portfolio of projects addressing functional improvements, data quality enhancement and technology and design improvements.
• Optimization effort now underway to continue improvement in performance and to maximize efficiencies over next 2 years.	 Continued planned investment in my CalPERS. 'Target state' for my CalPERS after Optimization not yet defined. 	Understand desired outcome from Optimization and use that information to inform budget forecast.	• Define a 'target state' for my CalPERS post- Optimization. Assess the gap between the current state and target state, and focus resources on closing that gap.



Key Issues and Related Recommendations

Assessment Area	Pre-recovery Period Assessment Findings	Post-recovery Period Assessment Findings	Recommendations
Business Process Reengineering(BPR)	Initial plans for BPR were not reflected in RFP and Contract with Accenture	Tight schedule made it difficult to do BPR, although some was accomplished	Now good timing for BPR - will simplify processes and improve productivity
Architecture and Design	Solid architecture blueprint was compromised by poor design and implementation	Architecture still solid, some improvements were made to design	Continue to invest in design to maximize long term sustainability of technical foundation
Leadership and Organizational Readiness	CalPERS leadership lacked large- scale project experience and organization was not prepared for enterprise transformation	CEO brought in highly experienced IT and project leadership team. Leadership's drive and motivation prepared organization for project go-live	Leadership in place, recommend joint strategic and planning exercises to enhance enterprise value in new initiatives and investments
Contract Management	Unwieldy contract made it difficult to manage and monitor real project progress	Collaborative partnership, less focus on paper deliverables, and more focus on real issues	Adjust future contract types and structure based on lessons learned from past
Teams Skills and Experience	Accenture team lacked pension knowledge and CalPERS resources were not appropriate for project	Accenture replaced many of their team and CalPERS changed team mix and engaged consultants	Continue building in-house skills. Augment with best practices and innovation from external sources
Extent issue addressed	High OMedium-High Medium (Medium-Low A	genda Item 8b-Attachment 1





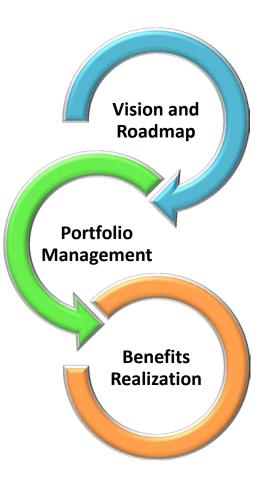


Costs and Benefits – Attainment of Goals

PSR Project Strategic Goal		Status
#1 —Provide an information system addressing all of the business requirements of California's public pension system.		Mostly Met – System implemented. Optimization is anticipated to automate some existing manual workarounds for exception handling.
#2 —Create a Web self-service environment that facilitates "one stop shopping" including access to and management of current customer account information.		Partially Met –Latest information available indicates approximately 50% of member transactions across five-predefined transaction types were available.
#3 —Eliminate the dependency on paper documents by providing the ability to accept information and process transactions electronically.		Partially Met – Some processes have reduced dependence on paper while other processes are still paper-dependent. As additional members migrate to utilizing self-service and as my CalPERS introduces more functionality, the dependency on paper should be reduced.
#4 —Increase the integrity of pension-related information by reducing multiple data stores and the manual entry of data.		Mostly Met – CalPERS reduced the number of separate data stores by combining legacy systems. Efforts underway to reduce manual entry and to continue to improve data integrity.
#5 —Reduce the information technology costs related directly to the support of the retirement line of business.	Not Known	Unknown – CalPERS did not track legacy system IT costs at a level granular enough to determine their baseline costs.
#6 —Reduce the time to implement required pension system changes.		Met –CalPERS conducted a study related to the effort required to complete PEPRA-related changes, and a 25% reduction was achieved.
#7 —Reduce the workload devoted to data clean-up and reconciliation.	Not Known	Unknown – CalPERS devoted significant resources to data clean-up and reconciliation prior to PSR. Data not available to make quantitative comparison with current workload. New system has potential to reduce workload, provided edits and data constraints are enforced.
#8 —Apply business rules uniformly across all business components to ensure CalPERS adheres to all mandated laws, regulations, and policies.		Mostly Met – Rules are consistently applied across various application areas, for example for calculations for retirement or estimates. However, there is still some inconsistent application of business rules.
#9 —Facilitate the movement to a more analytical work environment by automating more routine tasks.		Mostly Met – The PSR project resulted in the elimination of a number of routine tasks. However, numerous workarounds still exist. Optimization is slated to enhance automation, reporting and business intelligence areas.
#10 —Provide consistent presentation of pension related information across all CalPERS business processes.		Met. my CalPERS system has a consistent user interface and a single data source is used to populate those screens.

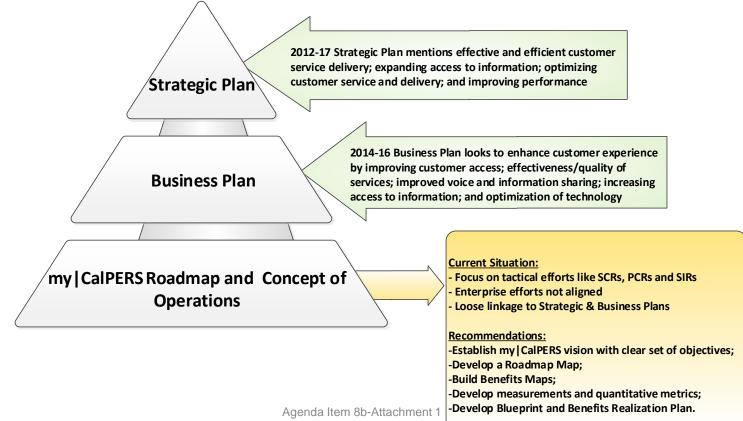


- 1. Create a my|CalPERS Vision and Roadmap: Refine the current Optimization Project Charter to include a Vision for the desired capabilities of my|CalPERS. This Vision should then be used as the foundation for a Roadmap that will define the changes and improvements that will be needed over the next several years.
- 2. Integrate the my|CalPERS Roadmap into enterprise portfolio management: All work related to my|CalPERS should be organized into a holistic enterprise-wide portfolio, and changes to the portfolio should be evaluated based on their support for the Vision and Roadmap.
- 3. Implement a Benefits Realization Management framework for my|CaIPERS: Document the expected benefits for each investment in the my|CaIPERS portfolio, assign specific accountability to achieving those benefits, and track their realization through a my|CaIPERS Benefits Register.



Recommendations – Vision and Roadmap

- Define a target state vision for my|CalPERS at the end of Optimization
- Align my|CalPERS target state with CalPERS' Strategic and Business Plans
- Define the specific benefits to be achieved by reaching the target state





- Expand Optimization work streams to include specific focus on the following:
 - Knowledge Transfer continued transfer of knowledge from contract staff to CalPERS employees
 - Business functionality improve business user efficiency and satisfaction
 - **Data** improve data quality and integrity, leverage data as an asset
 - Technology address remaining design and implementation issues, improve ability to perform long term maintenance and enhancement of system
 - Processes and tools improve IT staff productivity
 - Operations and Maintenance improve service quality and long term system stability



- Institute a Benefits Realization Management framework for my|CalPERS.
- Document and track the benefits to be achieved through the my|CalPERS Roadmap.
- Use to support the prioritizing and evaluation of the initiative included in the my|CalPERS project portfolio.

Work stream	Initiative	Benefit	Benefit Owner	Measure	Target	Due Date
Operations Process & Tools	Create a knowledge base for known frequent service desk calls to improve existing enterprise level service desk and its processes to my CalPERS with Level 1, Level 2 and Level 3 Support.	Increases staff's ability to work on value added enhancements - Improves efficiency - Provides greater consistency - Consolidates common tools	Customer Technology & Support Division(CTSD) Customer Services & Support(CSS)	- % of Business Analyst utilization -# of rejected SIRs in every release	15% increase in Business Analyst utilization/capacity for releases -Reject rate of SIRs will go down from 25% to 10%	mm/dd/yyy

Benefits Register (example)



- PSR was one of the most complex public sector IT projects in the nation.
- Mis-steps early in the planning and execution of the project set the project up for significant challenges and perhaps even failure.
- PSR succeeded in going live through the extraordinary efforts of CalPERS and Accenture over a three year period post-Recovery.
- System is now functional and meets the needs of a majority of users, although several of the original strategic goals are not yet fully met.
- In particular, to obtain the full useful life of the system, continued investment in technical foundation of my|CalPERS is required.
- Optimization period gives CalPERS the opportunity to refine the vision for how my|CalPERS will support CalPERS' business, and what investment is required.



- PSR Pension System Resumption project. The project to replace CalPERS' disparate pension and health systems with a single, integrated system. The system created as a result of PSR was named my|CalPERS.
- Recovery The process, initiated in mid-2010, to address weaknesses in the my|CalPERS solution and to drive to a successful implementation.
- Stabilization The process, initiated upon initial my|CalPERS go-live in September 2011, to stabilize production operations, address defects and increase customer and user satisfaction with the system.
- Optimization The process, started in September 2013, to mature statedriven maintenance and operations of my|CalPERS and to improve system performance and functionality.
- Benefit Realization Management "Benefits Realization Management is the process of organizing and managing so that potential benefits arising from change are actually achieved." (UK Office of Government Commerce)